



MOBILE ELEVATING WORK PLATFORMS

ANSI UPDATE:
A92.20, A92.22 & A92.24
EFFECTIVE: JUNE 1, 2020

MOBILE ELEVATING WORK PLATFORMS (MEWP'S)

Group A



MEWPS with platforms that move vertically,
But stay within the tipping lines.

Type 1 - can only travel
In a stowed position

Type 2 - can travel elevated,
controlled from the chassis

Group B



MEWPS, typically boom-type where the platform
extends beyond the machine's chassis.

Type 3 - Can travel elevated,
controlled from the platform

- ANSI/SAIA A92.2 - 2015 Vehicle-Mounted Elevating and Rotating Aerial Devices
- ANSI/SAIA A92.3 - 2006 (R2014) Manually Propelled Elevating Aerial Platforms
- ANSI/SAIA A92.5 - 2006 (R2014) Boom-Supported Elevating Work Platforms
- ANSI/SAIA A92.6 - 2006 (R2014) Self-Propelled Elevating Work Platforms
- ANSI/SAIA A92.7 - 2014 Airline Ground Support Vehicle-Mounted Vertical Lift Devices
- ANSI/SAIA A92.8 - 2006 (R2011) Vehicle-Mounted Bridge Inspection and Maintenance Devices
- ANSI/SAIA A92.9 - 2011 Mast-Climbing Work Platforms
- ANSI/SAIA A92.10 - 2009 (R2014) Transport Platforms
- ANSI/SAIA A92.20-2018 Design, Calculations, Safety Requirements and Test Methods for Mobile Elevating Work Platforms (MEWPs)
- ANSI/SAIA A92.22-2018 Safe Use of Mobile Elevating Work Platforms (MEWPs)
- ANSI/SAIA A92.24-2018 Training Requirements for the Use, Operation, Inspection, Testing and Maintenance of Mobile Elevating Work Platforms (MEWPs)

American National Standard Institute (ANSI)

- A92.20-Design
- A92.22-Safe Use
- A92.24-Training Standards

Address the design of new aerial lift equipment and the training operators, supervisors and maintenance workers must complete.

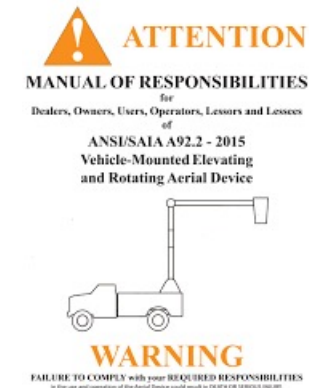
ANSI A92.22-24 DOES NOT APPLY TO:

This American National Standard is not applicable to:

- a) permanently installed personnel-lifting appliances serving defined levels,
- b) fire-fighting and fire rescue appliances,
- c) unguided work cages suspended from lifting appliances,
- d) elevating operator position on rail-dependent storage and retrieval equipment,
- e) tail lifts,
- f) mast-climbing work platforms (see ANSI/SAIA A92.9),
- g) fairground equipment,
- h) lifting tables with a lifting height of less than 2 m (6.56 ft.),
- i) builder's hoists for persons and materials,
- j) aircraft ground-support equipment (see ANSI/SAIA A92.7),
- k) digger derricks,
- l) industrial trucks with elevating operator positions,
- m) insulated aerial devices for use in live work on electrical installations, and
- n) vehicle-mounted elevating and rotating aerial devices (see ANSI/SAIA A92.2).



WCF
INSURANCE



OSHA

Scissor Lifts

OSHA considers a scissor lift as a mobile scaffold, addressed in 1926.452(w)



Boom Lifts

OSHA considers a boom lift as an aerial lift, addressed in 1926.453 & 1910.67.

- Extensible boom platforms
- Aerial Ladders
- Articulating boom platforms



OSHA



Section 1926.21(b)(2) requires employers to instruct each employee in the recognition and avoidance of unsafe conditions.

In the situation where operator capabilities are the issue, OSHA would first determine if the operator was trained and if no training was provided, issue a citation for violating 1926.21(b)(2). (Safety Training & Education)

Instruct in Hazard Recognition and Avoidance

If training was provided, OSHA would need to use the general duty requirements of paragraph 5(a)(1) of the OSH Act to address any related violations. In so doing, OSHA would use the ANSI requirements to help establish what the industry practice is in regard to operator qualifications.

The selection, positioning, operation, maintenance, inspections and risk assessments, will be done by a **qualified person**.

Person who by possession of a recognized degree, certificate or professional standing, or by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems related to the subject matter, the work or the project.

DESIGN CHANGES

Will require lifts to be equipped with two types of sensors:

- Audible alarm and prevents machine lift when safe load limits are exceeded.
- Audible alarm and prevents lift movement if a certain level slope is exceeded.

DESIGN CHANGES_{CONT.}

- Chains no longer acceptable on the gate.
- Guard railings must be at least 43.5 inches in height (old was 39”).
- Rough terrain MEWP must have solid or foam-filled tires.

NEW STANDARDS – SAFE USE – 92.22

Written Safe Use Plan, MEWP Specific:

- Site risk assessment to identify hazards, identify risks, develop control measures, and communicate with affected personnel;
- Selection and use of the MEWP's;
- Worksite inspections and preparation;
- Written rescue plan
- Documentation retention
- MEWP inspections

SAFE USE PROGRAM



Goal: To guide safe MEWP use on the job site.

1. This starts with a Site Risk Assessment (Task, Location, Personnel, Tools/Equipment)
 2. Identify associated hazards with the job,(surface, overhead power or encumbrances, height needed, confining areas, fall controls, etc.) Identify hazard controls.
 3. Based on the Risk Assessment, choose the appropriate MEWP for the job.
 4. Ensure proper inspection
 5. Ensure operator and occupants have been trained and Risk Assessment reviewed.
-

MOBILE ELEVATING WORK PLATFORM SAFE USE CHECKLIST

Company Name:

Date:

Worksite Location:

Completed By:

	ISSUES			COMMENTS
	YES	NO	N/A	
1. SITE RISK ASSESSMENT				
a. Hazards identified				
b. Risks evaluated				
c. Control measures developed				
d. Safety procedures communicated				
e. Other:				
2. WORKSITE INSPECTION				
a. Drop-offs/holes				
b. Bumps and floor/ground obstructions				
c. Debris				
d. Overhead obstructions				
e. Electrical conductors				
f. Hazardous locations				
g. Ramps/slopes				
h. Ground surface and support conditions				
i. Pedestrian/vehicle/equipment traffic				
j. Weather conditions				
k. Other:				
3. MEWP				
a. Suitable type selected				
b. Inspected as required				
c. Accessories/other equipment suitable				
d. Proper records/documentation retained				
e. Other:				
4. PERSONNEL				
a. Operators trained/familiarized/authorized				
b. Occupants trained				
c. Supervisors trained				
d. Rescue personnel trained and designated				
e. Other:				

MOBILE ELEVATING WORK PLATFORM
SITE RISK ASSESSMENT

Company Name:

Date:

Worksite Location:

Completed By:

	HAZARD	RISK	CONTROL
1			
2			
3			
4			
5			
6			
7			

MOBILE ELEVATING WORK PLATFORM SITE RISK ASSESSMENT

Boman County	7/17/21
Company Name:	Date:
Fairgrounds	Neal Grover
Worksite Location:	Completed By:

	HAZARD	RISK	CONTROL
1	Lift will be exposed to traffic	Collision	Will use traffic cones and caution tape to cordon off the work area.
2	Potential exposure to overhead powerlines (13,800 V)	Electrocution	Maintain a 10 foot distance.
3	Work area has curbing and drain covers where a wheel could drop.	Tip-over	These areas will be marked with cones and avoided.
4			
5			
6			
7			

NEW STANDARDS - TRAINING – ANSI A92.24



Operators: (any person qualified to control the movement of a MEWP)

- Hazards (operation, weather, stability factors)
- Controls and options
- Safety rules
- Traveling/transport
- Malfunctions & Emergency Situations, inc. Rescue.

Occupants: (any person on the work platform who is not an operator)

- Knowledge of the Safe Work Plan
- At least one occupant familiarized with controls in case of an emergency

Supervisors: (any person assigned to monitor the operator's performance)

- Proper MEWP Selection
- Rules, regulations and standards that apply to MEWPS
- Proper & Safe Operation

Other new training requirements include:

- Site- and equipment-specific rescue plan.
- Operator familiarization prior to operating a type of MEWP.
- Operators must explain to other workers on the lift how to get down if something happens to the operator.
- At least one person who can operate the equipment from the ground if the crew can't lower themselves.
- Maintenance workers must be trained on all new features, such as the tilt and load sensors.

FATALITIES INVOLVING MEWPS



Center for Construction Research & Training

33% Electrocutions

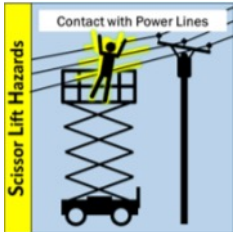
31% Falls

22% Tip-Overs

7% Caught in-between

5% Struck by

2% Misc.



PREVENTING ELECTROCUTIONS

VOLTAGE RANGE	MINIMUM SAFE APPROACH DISTANCE	
	(Feet)	(Meters)
0 to 300V	AVOID CONTACT	
Over 300V to 50KV	10	3.05
Over 50KV to 200KV	15	4.60
Over 200KV to 350KV	20	6.10
Over 350KV to 500KV	25	7.62
Over 500KV to 750KV	35	10.67

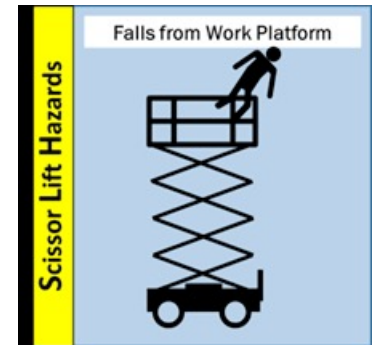
FALL PROTECTION

Always face the lift when mounting and dismounting

Always close entrance chains or doors

Stand on floor of platform

Do not climb on or lean over guardrails





PREVENTING TIP-OVERS

Do not exceed manufacturer rated load capacity

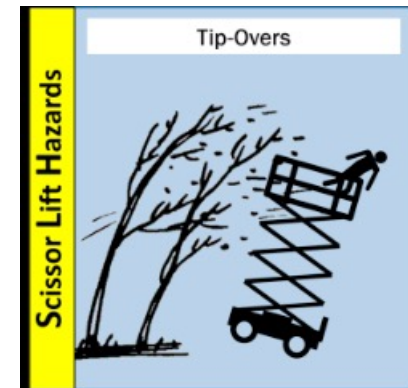
Minimize travel with lift in elevated position

Set up proper work zone protection

Positioning of lifts

- Do not drive near drop-offs or holes
- Do not raise platform on uneven or soft surfaces
- Do not drive onto uneven or soft surfaces when elevated
- Do not raise platform on slope or drive onto slope when elevated
- Do not raise platform in windy or gusty conditions (25 mph)

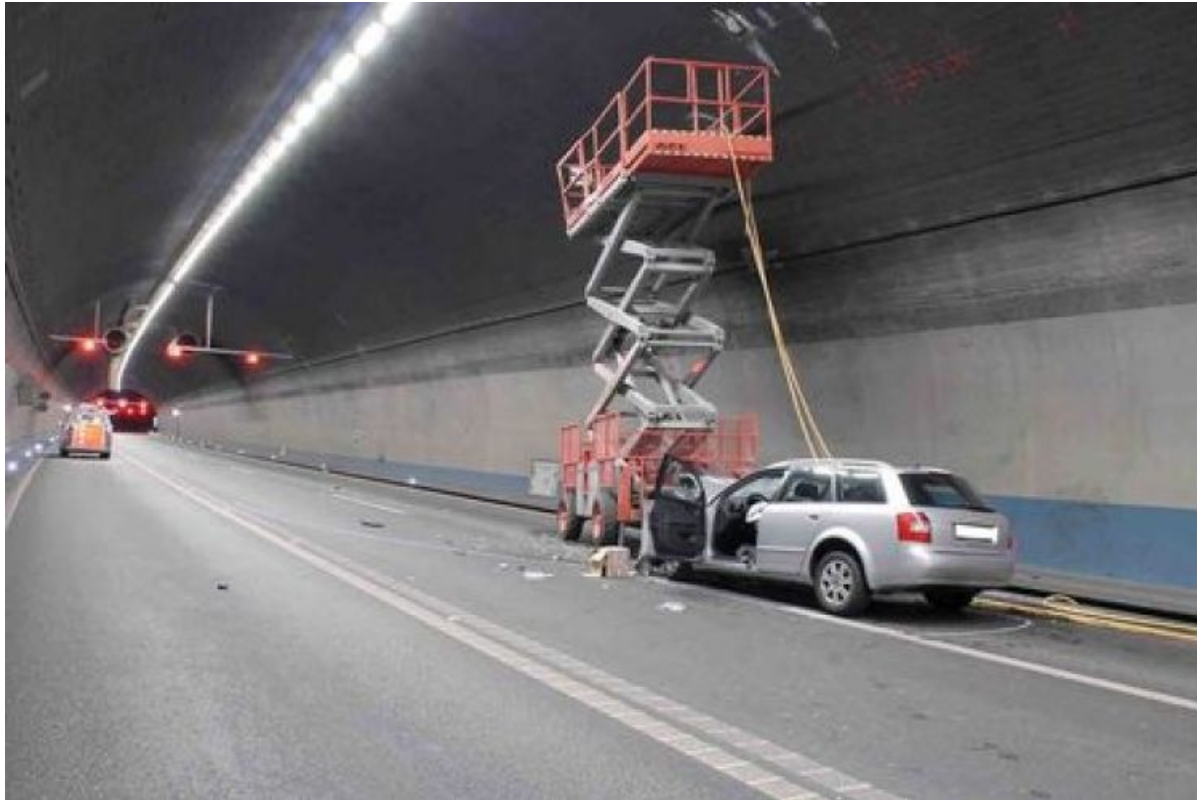
Avoid excessive horizontal forces when working on elevated scissor lifts (100 to 500 pounds – See capacity plate)













Rescue Plan

- Implement prior to start of work
- Must be in written format
- Made part of the training manual
- Carried out by appropriately trained personnel

Rescue Plan

Rescue Plan can include:

- Self-Rescue (by person involved)
- Assisted Rescue (by others in the work area)
- Technical Rescue (by emergency services)

Rescue Plan

Sample Situations that a rescue plan must include:

- Complete equipment malfunction
- Work platform entanglement
- After a fall

INSPECTIONS

Pre-start – Prior
to use



Frequent –
Every 3 months
or 150 hours



Annual – Within
13 months of
the prior annual

Mobile Elevating Work Platform Pre-use Inspection Checklist

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Inspector Name & Address: _____

Product Owner Name & Address

All inspections are to be performed by a person qualified for the specific make and model of mobile elevating work platform.

Check each item below. (Refer to Operation & Safety and Service & Maintenance Manuals for specific information regarding inspection procedures and criteria.) Indicate in the appropriate space as each item has been performed. If the item is found to be not acceptable, record each discrepancy. Correct all discrepancies prior to placing the machine back into service.

Inspector ensures that this machine has been inspected per each area of inspection.

Refer to www.JLG.com for Warranty, Product Registration, and other machine related documentation.

Owner ensures all discrepancies have been corrected prior to placing the machine back into service.

31219900 - 12/04/2020

have been corrected prior to placing the machine back into service.

31219900 - 12/04/2020



JLG Industries, Inc.
1 JLG Drive
McConnellsburg, PA 17233-9533

An Oshkosh Corporation Company

ECOLIFTS/PECOLIFTS

Pre-Delivery, Frequent, and Annual Inspection Report

Inspector Name & Address

Group A, Type 1

Product Owner Name & Address

Serial Number: _____
Machine Model: _____
Hourmeter Reading: _____
Current Inspection Date: _____ Previous Inspection Date: _____

All inspections are to be performed by a person qualified for the specific make and model of mobile elevating work platform.

☐ **PRE-DELIVERY:** Must be performed prior to each delivery by sale, lease, or rental. ☐ **FREQUENT:** Must be performed every three months or 150 hours of operation, whichever comes first.

☐ **ANNUAL INSPECTION:** Must be performed no later than 13 months from the date of the prior Annual Inspection.

Check each item below. (Refer to Operation & Safety and Service & Maintenance Manuals for specific information regarding inspection procedures and criteria.) Indicate in the appropriate space as each item has been performed. If the item is found to be not acceptable, record each discrepancy. Correct all discrepancies prior to placing the machine back into service.

P=Pre-Delivery, F=Frequent, A=Annual Mark as: Y=Yes (Passed) N=No (Failed) C=Corrected NA=Not Applicable P/F A			
FUNCTIONS AND CONTROLS			
1. Flywheel operating handle engages and disengages properly, and returns to the disengage position when released.			
2. Flywheel rotates smoothly to raise and lower platform.			
3. Flywheel connections are tight with no corrosion and free of debris.			
4. With the aid of an assistant, check for proper operation of the rear wheel auto locking brake mechanism (refer to Operation and Safety manual Function Check section).			
5. For ECOLift 50 the front caster wheel should retract and machine should be resting on front foot pads when entering the platform. Machine should return to rolling position when exiting the platform.			
MAST AND PLATFORM ASSEMBLY			
1. Platform attaches and latches securely to mast.			
2. Platform rails and floor pan are free of damage and the gate(s) close automatically.			
3. Mast sections are free of damage.			
4. Mast manual descent system operates properly.			
5. Tool Tray is properly secured and free of damage.			
6. Inspect all nuts, bolts, pins, shafts, shields, bearings, wear pads, locking devices, sheaves, sheave pins and bearings for proper installation, secure, no excessive wear, cracks or distortion.			

P=Pre-Delivery, F=Frequent, A=Annual Mark as: Y=Yes (Passed) N=No (Failed) C=Corrected NA=Not Applicable P/F A			
BASE ASSEMBLY			
1. Base weldment is structurally free of damage.			
2. Bubble level is secure, free of damage, clean, and responds to movement.			
3. Rear fixed wheels are secure, rotate freely, and are free of debris.			
4. Emergency manual descent tool is located in base, tool telescopes and retracts properly.			
5. Mast is straight, free of damage, and tightly secured to base.			
6. All wheels and casters contact floor.			
7. For ECOLift 50 - Self-retracting swivel caster operates properly, is secure to base, rotates freely, and is free of debris.			
8. For ECOLift 70 - Front caster wheels lock correctly, prevent machine from rolling when set, are secure to base, rotate freely, and are free of debris.			
MANUALS AND DECALS			
1. Operation and Safety Manual, ANSI/SAIA Manual of Responsibilities (ANSI markets only), and AEM Handbook (ANSI markets only) in manual storage box.			
2. All safety, capacity and instructional decals installed, secure and legible.			

P=Pre-Delivery, F=Frequent, A=Annual Mark as: Y=Yes (Passed) N=No (Failed) C=Corrected NA=Not Applicable P/F A			
GENERAL			
1. Machine is free of unauthorized modifications or additions.			
2. Applicable Safety Bulletins completed.			
3. Inspect general structural condition including all welds.			
4. Grease and lubricate per Service and Maintenance Manual.			
5. Drive and operate machine to test all machine functions.			
6. Record inspection date at "IMPORTANT" decal.			
7. Notify JLG of any ownership changes.			
8. Is Annual Inspection due?			
Comments:			

Inspector ensures that this machine has been inspected per each area of inspection.

Inspector: _____ / _____ / _____
Name Acknowledgment Date

Owner ensures all discrepancies have been corrected prior to placing the machine back into service.

Owner: _____ / _____ / _____
Name Acknowledgment Date

Refer to www.JLG.com for Warranty, Product Registration, and other machine related documentation.

31219906 - 12/04/2020



Insurance coverage in all states other than Utah is provided by WCF National Insurance Company, formerly known as Advantage Workers Compensation Insurance Company, a wholly-owned subsidiary of WCF Mutual Insurance Company.
WCF National Insurance Company is domiciled in Utah; NAIC No. 40517. Administrative office: P.O. Box 571918, Salt Lake City, UT 84157-1918.